

**REMARKS**

Claims 57-60, 66-68, 70, 79-81, 83, 86, 90-93, 95, 96, 102, 106-108, 110, 112, 115, 116, 118, and 119, which were withdrawn from further consideration pursuant to a Restriction Requirement dated March 30, 2007, have now been cancelled without prejudice. Applicants reserve the right to pursue claims similar or identical to these claims in one or more applications claiming priority to the instant application.

Claim 45 has been amended to recite attaching a membrane substantially transparent to incident electromagnetic radiation in the infrared to ultraviolet range having a pore size less than 2.0 microns to the chip such that the membrane is in fluid communication with the predetermined reaction site. Claim 45 has also been amended to recite that the predetermined reaction site is constructed and arranged to maintain at least one living cell at the predetermined reaction site. Support for this amendment can be found in the specification, for instance, on page 14, line 13 to page 16, line 12, on page 18, line 28 to page 19, line 10, or on page 64, lines 1-17

New independent claim 120 is substantially identical to claim 35 as originally filed on September 16, 2003, except that "1 ml" has been amended to "2 ml." Support for "2 ml" can be found in the specification, for example, on page 18, lines 18-23 (the amendment of changing "1 ml" to "2 ml" occurs in many of the following amendments as well). Similarly, new independent claim 132 is substantially identical to claim 37. New dependent claims 121-131 and 133-142 each depend from independent claims 120 and 133, respectively, and are supported by the specification. In addition, new claims 143 and 144 are substantially identical to claims 55 and 56 as originally filed. New independent claim 145 is substantially identical to claim 1 as originally filed. New claim 146 is substantially identical to claim 9 as originally filed. New claim 147 is substantially identical to claim 23 as originally filed. New claim 148 is substantially identical to claim 29 as originally filed. New claim 149 is substantially identical to claim 38 as originally filed. It is not seen where in the prior art is the subject matter of claims 120-149 disclosed or suggested. New independent claims 148-166 have also been added supported by the specification.

No new matter has been added by any of these amendments. Claims 45-54 and 120-147 are now pending for examination.

**Rejections under 35 U.S.C. §102(b)**

Although the Office Action on page 2 states that claims 45-50 have been rejected under 35 U.S.C. §102(b) in view of Thomas, Int. Pat. Apl. Pub. No. WO 99/55827 (“Thomas”), the rejection that follows also appears to include claims 53-54. Accordingly, it is believed that the Patent Office intended to reject claims 45-50, 53, and 54 on these grounds. Clarification is respectfully requested if this is incorrect.

Applicants have amended claim 45 to recite attaching a membrane substantially transparent to incident electromagnetic radiation in the infrared to ultraviolet range having a pore size less than 2.0 microns to the chip such that the membrane is in fluid communication with the predetermined reaction site. Thomas nowhere discloses or suggests a membrane substantially transparent to incident electromagnetic radiation in the infrared to ultraviolet range having a pore size less than 2.0 microns. Thus, it is believed that claim 45, as amended, is patentable over Thomas. Accordingly, Applicants respectfully request that the rejection of independent claim 45 be withdrawn. The remaining claims each depend, directly or indirectly, from claim 45, and should be allowable for at least these reasons. Withdrawal of the rejection of these claims is also respectfully requested.

**Rejections under 35 U.S.C. §103(a)**

Claims 47, 48, and 50-52 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Thomas, as applied to claim 45, in view of Kellogg, *et al.*, U.S. Pat. Apl. Pub. No. 2004/0259237 (“Kellogg”) and/or Wilding, *et al.*, U.S. Pat. No. 6,184,029 (“Wilding”).

Claims 47, 48, and 50-52 each depend, either directly or indirectly, from claim 45. As described above, Thomas does not teach or suggest the limitations of claim 45, as amended. It is believed that the combination of Kellogg and/or Wilding to Thomas, to the extent that such combinations can be made (which Applicants do not concede), do not reach the limitations of claim 45, as amended. Accordingly, it is respectfully requested that the rejection of claims 47, 48, and 50-52 be withdrawn.

**CONCLUSION**

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after the foregoing remarks, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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